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# भारत का राजपत्र

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प्राप्तिकार से प्रकाशित

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No. 23] NEW DELHI, SATURDAY, JUNE 4, 1988 (JYAIKTHA 14, 1910)

इस भाग में भिन्न पृष्ठ संख्या वाली जाती है जिससे कि यह अलग संकलन के रूप में रख जा सके।

[Separate paging is given to this Part in order that it may be filed as a separate compilation]

### भाग III—खण्ड 2

#### [PART III--SECTION 2]

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस

[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

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Calcutta, the 4th June 1988

List No. 1023/88

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**APPLICATION FOR PATENTS FILED AT  
THE HEAD OFFICE  
234/4, ACHARYA JAGADISH BOSE ROAD  
CALCUTTA-20**

The dates shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act, 1970.

The 26th April 1988

335/Cal/88. Draiswerke GmbH. Agitator Mill.

336/Cal/88. Compular Limited. Improvements in and relating to printing apparatus (Convention dated 28th April 1987 and 11th September, 1987) (8710059 & 8721460) both are U. K.

337/Cal/88. Compagnie Generale Des Materiaux Nucleaires. A method and apparatus for evaluating the rare metal content of a natural geological formation.

The 27th April 1988

338/Cal/88. Beloit Corporation. Multi-ply web forming apparatus & method. (Convention dated 1st May, 1987) (8710428) U. K.

339/Cal/88. Pennwalt Corporation. Polyalkyleneoxyamine catalysts for dialkyl disulfides and/or polysulfides used in dissolving sulfur.

340/Cal/88. Pennwalt Corporation. Sulfur dissolving composition...

341/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to differential temperature sensor and instrumentation system incorporating same for detecting the presence of water.

342/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to dry ash handling system.

343/Cal/88. Westinghouse Electric Corporation. Improvements in or relating to improved discrete excitation coil producing seal at continuous casting machine pouring tube outlet nozzle/mold inlet interface.

344/Cal/88. Injectall Limited. Molten metal sampling. (Convention dated 1st May, 1987) (8710378) U. K.

The 29th April 1988

345/Cal/88. (1) Leningradsky Technologichesky Institut Tselljulozno-Bumazhnoi Promyshlennosti (2) Leningradskoe Proizvodstvennoe Textilno-Galan-Tereinoe Obiedinenie "Sever". Method of forming a relief image on a base.

346/Cal/88. Surgikos, Inc. Odorless aromatic dialdehyde disinfecting and sterilizing composition.

347/Cal/88. (1) Veb Petrochemisches Kombinat Schwedt, (2) Bergakademie Freiberg, (3) Toyo Engineering Corporation, (4) Mitsui Kozan Chemicals Co. Process for Preparing briquettes of Brown coals used to pyrolysis.

348/Cal/88. Eiichi Hatakeyama. Method for producing shrimp meat paste.

349/Cal/88. Nabisco Brand, Inc. A method of making an edible firm gel composition capable of being ground for producing soft-texturedbaked products.

The 2nd May 1988

350/Cal/88. Dr. Kunal Ghosh. Stabilized 3 wheeler family car.

351/Cal/88. Surgikos, Inc. Disinfecting and sterilizing composition.

352/Cal/88. Surgikos, Inc. Fluid injection system.

353/Cal/88. Surgikos, Inc. Fluid injection system cassette and fluid packaging methods.

354/Cal/88. Surgikos, Inc. Fluid injection system coupling and injector valve assembly.

355/Cal/88. Surgikos, Inc. Fluid injection system pump and pumping methods.

356/Cal/88. Uni-Frac, Inc. Vapor/liquid contact column structure.

357/Cal/88. Tilak Krishna Sahgal. Single phase kilowatt hour meter.

The 3rd May 1988

358/Cal/88. Degussa Aktiengesellschaft. A phosphate-free detergent builder.

359/Cal/88. Hoechst Aktiengesellschaft. Water-soluble naphthyl azo pyrazolone compounds, a process for their preparation and their use as dyestuffs.

360/Cal/88. Hoechst Aktiengesellschaft. Process for the preparation of pure nitro-aminobenzene compounds.

361/Cal/88. B. V. Optische Industrie "De Oude Delft". Collimating mark device.

362/Cal/88. B. V. Optische Industrie "De Oude Delft". Device for slit radiography with image equilibration.

**APPLICATION FOR PATENTS FILED AT  
THE PATENT OFFICE BRANCH  
MUNICIPAL MARKET BUILDING, THIRD FLOOR  
KAROL BAGH, NEW DELHI-5**

The 28th March 1988

248/Del/88. Indian Council of Agricultural Research. "Improvements in or relating to the development of recipes for making mould/fungus free glass fibre textile yarn".

249/Del/88. Emhart Industries, Inc. "Control for electronic lock".

The 29th March 1988

250/Del/88. Kurt Muller. "A centering cage for a cylindrical structural part".

251/Del/88. Valery Borisovich Sholokhov & others. "Molecular vacuum pump".

252/Del/88. Institut Elementoorganicheskikh Soedineniy imeni A. N. Nesmeyanova Akademii Nauk SSSR. "A process for producing bis (Naphthalic) Diimides".

253/Del/88. Digital Equipment Corporation. "Cmos integrated circuit having a top side substrate contact and method for making same".

The 30th March 1988

254/Del/88. Acumeter Laboratories, Inc. "Poppet valve controlled fluid nozzle applicator".

255/Del/88. BP Chemicals Ltd. "Crosslinkable silyl polymer composition". (Convention date April 2, 1987) (U. K.).

256/Del/88. BP Chemicals Ltd. "Fibre optic cable having a layer of a polyethylene composition". (Convention date April 15, 1987) (U. K.).

257/Del/88. Shell Internationale Maatschappij B.V. "Process for the production of methanol and a composition suitable for use as a catalyst in said process. (Convention date April 3, 1987) (U. K.).

258/Del/88. Shell Internationale Research Maatschappij B. V., "Process for the production of methanol and a composition suitable for use as a catalyst in said process". (Convention date April 3, 1987) (U. K.).

259/Del/88. Shell Internationale Research Maatschappij B. V., "Process for the production of methanol and a composition suitable for use as a catalyst in said process". (Convention date April 29, 1987) (U. K.).

260/Del/88. Council of Scientific & Industrial Research, "A process for the preparation of a crystallisable coating composition for coating the surfaces for mild steel and stainless steel".

261/Del/88. Council of Scientific & Industrial Research, "An improved process for the preparation of 1,1,1-trichloro-4-methyl pent-3-enc-2-yl-diazoacetate". [Divisional date March 5, 1986].

262/Del/88. Council of Scientific & Industrial Research, "Improvement(s) in the preparation of iron blue pigment".

263/Del/88. Council of Scientific & Industrial Research, "Improved process for the carbonylation of alcohols to carboxylic acids".

264/Del/88. Council of Scientific & Industrial Research, "An automatic etching system for producing extremely fine tips".

APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH, AT TODI ESTATES, 3RD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

The 16th March 1988

68/Bom/88. Mohanlal Purushottamdas Tank & Vinod Mohanlal Tank. A multi propeller axial flow pump.

The 17th March 1988

69/Bom/88. Rattan Lal Sud. Multilayer Carboys/containers.

The 18th March 1988

70/Bom/88. Hoechst India Ltd. A process for the preparation of novel water soluble polyoxxygenated labdane derivatives and pharmaceutically acceptable salts thereof.

The 21st March 1988

71/Bom/88. Ozarde Shivling Ramkrishna. A method of preparing a lotion or a cream applicable to human body-skin for therapeutic uses and many therapeutic reliefs.

The 22nd March 1988

72/Bom/88. M. D. Agrawal. Four edge saving blade and its razor.

The 23rd March 1988

73/Bom/88. RTE Deltec Corporation. Uniterruptible Power Supply.

74/Bom/88. Nitin J. Deshmukh and Dr. S. G. Deshpande. Granulation apparatus and process for the manufacture of spherical shaped granules or pellets (Sphelletizer).

75/Bom/88. Iziz Industries Israel Ltd. Hydrogen pump.

76/Bom/88. Earl Bihari Pvt. Ltd. A safety chain for doors and a method of fixing thereof.

77/Bom/88. Subhanjan Mohanty. A furnace.

The 24th March 1988

78/Bom/88. R. Krishnan. Coloured flame candles.

The 25th March 1988

79/BOM/88. Mangesh Shankarrao Nikam. An automatic controller of starter for water pumps.

80/Bom/88. Kunda Ajitkumar Patel & Rajesh Dattaram Mehta. An improved Ni-Cd rechargeable torch.

The 28th March 1988

81/Bom/88. Pankaj Kishore Shah. C. N. C. Multislide Hydraulic Cutting & Forming Press.

82/Bom/88. Kishor M. Shah. Automatic strip decoiler, coiler device.

83/Bom/88. Virendra Rasiklal Doshi. Device for elevating materials in the form of liquid, powder, granule, slurry, liquified gas and the like.

84/Bom/88. Neela Vinayak Rashinkar. An improved detaping machine for unwinding tape from cable.

85/Bom/88. Ravindrakumar Ramjibhai Yadav. Perforated bidi and cigar (Choot).

The 29th March 1988

86/Bom/88. Bajaj Auto Limited. A two stroke internal combustion engine.

87/Bom/88. Vinay Kumar Bhargav. Double Walled Mug.

The 30th March 1988

88/Bom/88. Prakash Purushottam Deo. Improvements in or relating to miniature circuit breakers.

#### ALTERATION OF DATE

162521. Ante dated to 24th December, 1979.  
(557/Del/83)

#### COMPLETE SPECIFICATION ACCEPTED

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CLASS : 12-B & D; 35-E; 129-G + N; 188. 162481

Int. Cl. : B 28 b 19/00, 21/94; B 23 p 3/00; E 04 c 5/00, 5/04.

**AN IMPROVED PROCESS FOR FORMING A MAT OUT OF METAL FIBERS.**

Applicant : COMBUSTION ENGINEERING, INC. OF 1000 PROSPECT HILL ROAD, WINDSOR, CONNECTICUT 06095, UNITED STATES OF AMERICA.

Inventor 1. CORD HENRY SUMP.

Application No. 90/Cal/84 filed February 6, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

**7 Claims**

An improved process for forming a mat out of metal fibers including the steps of dispersing a finely-divided brazing material through a viscous liquid-like material which will decompose during brazing and leave no residue, coating the fibers with the mixture of brazing material and viscous liquid-like material such as herein described to spread the brazing material evenly over the fibers, the improvement comprising the steps of :

- (a) forming the coated fibers in a layer over the surface of a support member with the surface of the support member being of such a material that it will not become brazed to the fibers when brazing temperature is applied thereto;
- (b) placing the coated fibers and support member in an atmosphere having a temperature high enough to decompose the liquid-like material and braze the fibers together into a loosely formed mat;
- (c) removing the mat from the support member;
- (d) reducing the thickness of the mat to thereby increase the density of the mat;
- (e) placing the mat again in an atmosphere having a temperature high enough to again melt the brazing material; and
- (f) rebraze the fibers together into a more dense mat of unusual strength.

Compl. specn. 10 pages.

Drgs. 2 sheets.

CLASS : 85-P; 141-C. 162482

Int. Cl. : C 04 b 7/00; F 27 b 15/00.

**APPARATUS FOR HEAT TREATMENT SUCH AS DEHYDRATION OF POWDERED MATERIALS SUCH AS ALUMINA AND/OR CEMENT.**

Applicant : VSESOJUZNY NAUCHNO-ISSLEDHOVATELSKY I PROEKTNY INSTITUT ALJUMINIEVOI MAGNIEVOI I ELEKTRODNOI PROMYSHLENNOSTI, OF LENINGRAD SREDNY PROSPEKT, 86, USSR.

Inventors : 1. VLADIMIR ILICH KAUFMAN, 2. GERMAN ABRAMOVICH KAIM, 3. EDUARD LVOVICH YAGUD, 4. VIKTOR PROKHOROVICH LYAKHOV, 5. PAVEL IVANOVICH SOKOLOV, 6. GARRY VLADIMIROVICH TELYATNIKOV.

Application No. 548/Cal/84 filed August 3, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

**5 Claims**

An apparatus for heat treatment such as dehydration of powdered materials such as alumina and/or cement comprising a gas duct having its power part connected with a chamber of a cross-section exceeding that of the gas duct, a charging device connected to the gas duct, a pipe branch connection to supply 1 heat carrier into the chamber, and a device adapted to separate processed solid material from heat carrier and provided with an inlet pipe branch connected to the gas duct, a discharge pipe branch, and an outlet pipe branch, the upper part of the chamber accommodating a cone spreader fitted with a collar around the cone base and arranged coaxially with the gas duct.

Compl. specn. 10 pages.

Drgs. 1 sheet.

CLASS : 27-G & N. 162483

Int. Cl. : E 04 b 1/347; E 04 g 3/00.

**SPACE FRAMES.**

Applicant : TULSERATE LIMITED, OF 14 DOMINION STREET, LONDON EC2M 2RJ, ENGLAND.

Inventor 1. EDWIN THOMAS CODD.

Application No. 578/Cal/84 filed August 20, 1984.

Convention dated on 23-8-83 (No. PG-0988) Australia.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

**12 Claims**

A space frame comprising a plurality of frame members interconnected at nodes, comprising :

- (a) tubular frame members each of which is flattened at its connecting end, said flattened end being formed with transversely stepped upper and lower parts separated by a shoulder, the top surface of the lower part being substantially in the same plane as the bottom surface of the top part each of said upper and lower parts being formed with connecting openings extending therethrough,
- (b) said frame members being positioned so that the upper part of one frame member overlies the lower part of a laterally adjacent second frame member with the connecting openings aligned, and the lower part of said one frame member underlies the upper part of a laterally adjacent third frame member with the connecting openings being similarly aligned, said third frame member being located generally opposite but not connected to second frame member; lower and upper parts of a further adjacent disposed frame member or members being similarly constructed and aligned, and
- (c) connecting means extending through said connecting openings to secure said frame members at the node.

Compl. specn. 10 pages.

Drgs. 2 sheets.

CLASS :

162484

Int. Cl. : B 04 c 7/00.

**A FLUID PURIFIER FOR SEPARATION OF VOLATILE CONTAMINANT FROM A CONTAMINATED FLUID.**

Applicant : PALL CORPORATION, OF 30 SEA CLIFF AVENUE GLEAN COVE, NEW YORK 11542, UNITED STATES OF AMERICA.

Inventors : 1. EVAN ERNEST KOSLOW.

Application No. 689/Cal/84 filed September 27, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 13 Claims

A device for separating a fraction of a volatile contaminant from a contaminated fluid, the device comprising a vacuum chamber, the internal space of which may be at least partially evacuated; means for dispersing the contaminated fluid into small droplets including at least one plate capable of being rotated which is within the vacuum chamber and means for introducing the contaminated fluid onto the surface of the rotating plate; and means spaced from the rotating plate for coalescing the small droplets coming out from the edge of the rotating plate, the distance between the edge of the rotating plate and the coalescing means yielding a sufficient droplet residence time to permit the fraction of the volatile contaminant to be separated from the contaminated fluid as the droplet travels between the edge of the rotating plate and the coalescing means and a means for collecting the purified fluid and means for drawing out the volatile contaminant.

Compl. Specn. 16 pages.

Drgs. 1 sheet.

CLASS : 145-D.

162485

Int. Cl. : D 21 g 1/00.

## SUPERCALENDERS USED IN PAPER MAKING MACHINES.

Applicant : BELOIT CORPORATION, OF P. O. BOX 350, BELOIT WISCONSIN 53511, UNITED STATES OF AMERICA.

Inventors : 1. GERALD WINNARD KARR, 2. GERNOT MULIER.

Application No. 797/Cal/84 filed October 8, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 20 Claims

A calender having a vertical stack of a plurality of rotary rolls, each of said rolls having bearing structure at each opposite end provided with a thrust shoulder co-operative with a stop shoulder on a respective suspension spindle at each end of the rolls, means for guiding said bearing structures for vertical movement, and means for vertically shifting said rolls between a lowered mode for spaced apart independent suspension by engagement of said thrust shoulders with said stop shoulders a raised nipping mode relation with one another wherein said thrust shoulders are raised from said stop shoulders, and comprising :

means for relieving the weight of said bearing structure from said rolls in said raised nipping mode relation; and means for operating said relieving means.

Compl. Specn. 14 pages.

Drgs. 3 sheets.

CLASS : 80-A.

162486

Int. Cl. : B 01 d 23/06, 29/26.

## INSERT FOR A WATER PURIFICATION DEVICE AND A WATER PURIFICATION DEVICE HAVING SAID INSEKT.

Applicant : BRITA WASSERFILTER GMBH, WALDSTR. 4, 6204 TAUNUSSTEIN 4, FEDERAL REPUBLIC OF GERMANY.

Inventor : 1. HEINZ HANKAMMER.

Application No. 191/Cal/85 filed March 14, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

An insert for a water purifier comprising substantially cylindrical side walls (9) with, at the ends thereof, a filter top (16) and a filter bottom (10) and with an annular sealing means (12, 22) which is secured to the upper end of the side walls (9), characterized in that the insert (8) comprises a distributor (15) and a cup portion (11) connected thereto, which respectively have at least a guide tube (13, 17) extending into the interior of the insert and an annular flange (12) for securing to the other annular flange (22), that the guide tubes (13, 17) are of unequal diameter and are arranged concentrically relative to each other in the assembled condition, that the upper annular flange (22) is secured to the filter top (16) of the distributor (15), said filter top having an end wall (21) and filter slots (23) in a cylindrical wall (20), and that filter means (14, 25) are provided at the inner guide tube (13).

Compl. Specn. 15 pages.

Drgs. 3 sheets.

CLASS : 119-A, B &amp; D.

162487

Int. Cl. : D 03 d 37/00.

## IMPROVEMENTS IN OR RELATING TO CIRCULAR WEAVING LOOMS.

Applicant & Inventor : FRANZ XAVER HUEMER, OF SONNENHURGASSE 4, 1060 VIENNA, AUSTRIA.

Application No. 431/Cal/85 filed June 7, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A circular weaving loom having a circular reed in which a travelling shed is formed by warp threads to produce a tubular fabric along an edge of said shed by weft thread paid-off from a bobbin of a shuttle traveling in a circular path in said reed and said shed, characterised by a weft thread monitoring device comprising :

a tipping lever pivotally mounted on said shuttle and comprising a rod extending parallel to said bobbin and over which the weft thread from said bobbin is paid-out after being at least partially wound about said rod, respective support arms connected to each end of said rod and pivotally mounting said lever on said shuttle, and an actuating arm connected to one of said support arms for swinging movement with said lever toward said reed upon relaxation of a force applied to said rod by said warp thread as it is paid-out from said bobbin into said shed to form said fabric at said edge;

means for generating a restoring force on said tipping lever biasing same in a direction tending to swing said actuating arm toward said reed; and

at least one signal generator disposed along said reed and responsive to the passage of said shuttle when said actuating arm has been swung toward said reed in contactless manner for generating a stop signal to terminate operation of the loom and prevent weft threads faults from being produced in said fabric upon a weft thread failure.

Compl. Specn. 13 pages.

Drgs. 2 sheets

CLASS : 116-G; 167-C.

162488

Int. Cl. : B 65 g 49/00.

## PLANT FOR SORTING ITEMS, WITH SELF DRIVEN CARRIAGES.

Applicant & Inventor : CANZIANI FRANCESCO, OF VIA CONTARDO FERRINI 21, SAN MACARIO (VARESE), ITALY.

Application No. 559/Cal/85 filed July 31, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A plant for sorting items, of the kind comprising a plurality of conveyor carriages movable along a fixed path characterized by providing for independent handling means for all or part of said carriages.

Compl. Specn. 10 pages.

Drgs. 3 sheets.

CLASS : 129-H, G & Q; 93.

162489

Int. Cl. : B 22 f 3/08; B 23 k 19/00; B 23 p 3/09.

INSTALLATION FOR EXPLOSION WORKING OF MATERIALS.

Applicant : SPLTSIALNOE KONSTRUKTORSKOE BZURO GIDROIMPULSNOI TIKHNIKI SIBIRSKOGO OTDELENIA AKADEMII NAUK SSSR, OF NOVOSIBIRSK, ULITSA TERESHKOVI, 29, USSR.

Inventors : 1. JURY GRIGORIEVICH KUZNETSOV, 2. ALEXANDER LUKICH SANIN, 3. JURY PETROVICH RYKOV.

Application No. 23/Cal/86 filed January 13, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 2 Claims

An installation for explosion working of materials comprising an explosion chamber having a body consisting of a movable part and a stationary part fixed together by a locking device, a work table installed in the explosion chamber and attached to the movable part of the body of the explosion chamber; a main of a ventilation system of the explosion chamber communicating with the explosion chamber; a locking member installed in the ventilation main of the explosion chamber and having a body installed in the ventilation main and mechanically connected with the stationary part of the body of the explosion chamber, and a gate-valve located in the body of the locking member with the possibility to move so as to close the ventilation main, and mechanically connected with the movable part of the body of the explosion chamber in such a way that closing of the ventilation main occurs at the moment of attaching the movable and stationary parts of the body of the explosion chamber.

Compl. Specn. 9 pages.

Drgs. 2 sheets.

CLASS :

162490

Int. Cl. : B 65 g 54/00.

FEEDER OF LOOSE MATERIALS.

Applicant : PROIZVODSTVENNOE GEOLOGICHESKOE OBEDJENIE TSENTRALNYKH RAIONOV "TSENTRGEOLOGIA", OF VARSHAVSKOY SHOSSE, 39A, MOSCOW, USSR.

Inventor : 1. RUBEN ARMENOVICH TATEVOSIAN, 2. MIKHAIL YAKOVLEVICH TITOV.

Application No. 57/Cal/86 filed January 27, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

A feeder of loose materials comprising a hopper, a chamber with a control means arranged in the lower portion of the chamber and having the form of a latticed partition provided with kinematically disconnected magnetic bodies arranged on this partition, and a source of alternating magnetic field with magnetic lines of force thereof covering the chamber, the latticed partition being fashioned as a plurality of parallel vertically arranged plates secured in recesses of the chamber by means of horizontal pins to be capable of oscillating relative to the pins.

Compl. Specn. 15 pages.

Drgs. 5 sheets.

## CLASS : 144 B.

162491

Int. Cl. : C09k 3/28.

"A PROCESS FOR THE PREPARATION OF FIRE RESISTANT COATING MATERIAL".

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110 001, India, an Indian registered body incorporated under the Registration of Societies Act. (Act XXI of 1860).

Inventors : SUDHISH CHANDRA BANERJEE & RAMAGYAN SINGH.

Application for Patent No. 118/Del/84 filed on 7th February, 1984.

Complete specification left on 30th April, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 3 Claims

A process for the preparation of a fire resistant coating material comprising adding a known ionic wetting agent to a urea formaldehyde resin solution under stirring to produce a foam, adding a mineral acid such as herein described with continued stirring for coagulation and air drying the product formed.

Provl. Specn. 3 pages.

Compl. Specn. 5 pages.

## CLASS : 85 K.

162492

Int. Cl. : F23b 1/28.

"AN IMPROVED FURNACE FOR USE WITH PARTICULATE FUELS".

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110 001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventors : KAMTA NATH GAUR, BARENDRA MOHAN SEN, SVANTA KUMAR DASGUPTA, MANOJ MOHAN SEN, DILIP KUMAR BISWAS, KURLA-GUNDA NAGRAJARAO & SUBRATA DASGUPTA.

Application for Patent No. 122/Del/84 filed on 7th February, 1984.

Complete specification left on 30th April, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 3 Claims

An improved furnace for use with particulate fuels comprising a cylindrical heat exchanger placed vertically over a cylindrical combustor provided with air fuel inlet fitted with a husk distributor, an annular ring with perforations provided inside the combustor just above the opening of fuel inlet for admission of secondary air, a perforated grate provided at its bottom, a cylindrical hollow shaft passing centrally through the grate and having attached thereto stirrers having perforation and grate scrapper in the portion inside the combustor and a blade scrapper outside the combustor, the scrapper being enclosed in a conical ash hopper fitted with an outlet for ash discharge and means for rotating the shaft attached to the bottom of the shaft.

Provl. Specn. 7 pages

Drgs. 3 sheets

Compl. Specn. 12 pages.

Drgs. 2 sheets

CLASS : 107 C.

162493

Int. Cl. : F02f 1/00.

"AN IMPROVED PROCESS FOR COATING THE METALLIC SURFACES OF A COMBUSTION CHAMBER".

Applicant : M/s. Bharat Heavy Electricals Limited, having its Registered Office at 18-20, Kasturba Gandhi Marg, New Delhi-110 001, India, an Indian Body corporate.

Inventors : NARAYANA RAM MOHAN, NARASIMHAN RAMADASS AND DAMPALA MAHESWAR REDDY.

Application for Patent No. 231/Del/84 filed on 13th March, 1984.

Complete specification left on 7th June, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 2 Claims

A process for coating the metallic surfaces of combustion chamber which comprises in the step of thermal spraying a coating of highly heat resistant ceramic material selected from partially stabilised Zirconia, Cordierite or lithium alumino silicate and to a thickness of 0.1 mm to 2 mm.

Provl. Specn. 4 pages.

Compl. Specn. 5 pages.

CLASS : 204.

162494

Int. Cl. : G01g 1/00.

A LOCKING MEANS FOR USE WITH A SINGLE PAN BALANCE.

Applicant : MODERN BALANCE WORKS, a registered partnership firm, whose partners are UMA SHANKER CHAURASIA AND BHANU SHANKAR CHAURASIA of D-54/19, Aurangabad, Varanasi-221 001, U.P., India, both Indian Nationals.

Inventor : BHANU SHANKER CHAURASIA.

Application for Patent No. 516/Del/84 filed on 26th June, 1984.

Complete Specification left on 29th August, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 8 Claims

A locking means for use with a single pan balance comprising a pair of upright pins mounted on an arrestment plate and in the immediate proximity of opposite sides of a beam so as to prevent displacement of the said beam by a horizontal force exerted on the balance, a pair of arms extending upwardly from the sides of the said arrestment plate, the upper end of each of the said arms having an integral guard in the form of a channel within which a stirrup plate is housed, said guards preventing displacement of the stirrup plate by transverse force exerted against the balance, further means for preventing upward displacement of the said stirrup plate and still further means for preventing displacement of suspension means in conjunction with said stirrup plate.

Compl. Specn. 14 pages.

Drg. 1 sheet.

Provl. Specn. 6 pages.

CLASS : 98 I.

162495

Int. Cl. : F24j 3/02.

## "A SOLAR COLLECTOR"

Applicant : VIKAS ENGINEERING CORPORATION, a proprietary concern whose proprietor is MOHD SHAKIR QIDWAI of Mauni Mandir, Sulochanpur (U. P.) India, an Indian National.

Inventor : QIDWAI MOHD SHAKIR.

Application for Patent No. 721/Del/84 filed on 13th September, 1984.

Complete specification left on 12th December, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 7 Claims

A solar collector comprising an absorber, containing a liquid, one or more transparent sheets disposed above said absorber so as to define a closed chamber between said absorber and transparent sheet or sheets, said absorber having an inlet pipe and an outlet pipe for a liquid connected to a heat exchange chamber, the liquid at an elevated temperature in the absorber flowing through the outlet pipe into said heat exchange chamber displacing the liquid at a lower temperature within said chamber into said absorber through said inlet pipe and flowing back to heat exchange chamber effecting a closed loop recirculation the heat exchange chamber being disposed in a water storage tank or a bio-gas digester.

Provl. Specn. 6 pages.

Compl. Specn. 9 pages.

Drg. 1 sheet.

CLASS : 80 B&amp;D.

162496

Int. Cl. : B01d 25/00.

## "IMPROVED FILTER".

Applicant : GEORGES MOATTI, a French Company, of 125, avenue pierre Curie, 78210 Saint Cyr L' Ecole, France.

Inventors : JEAN CLAUDE MOATTI AND THEOPHILE CHRISTOPHE.

Application for Patent No. 853/Del/84 filed on 7th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 2 Claims

A filter for all purposes, particularly fuel oil, gazoil and/or lubricating oil, constituted by :

a filter body comprising distinct chambers isolated from one another.

a main stack of filtering elements contained in one of said chambers called main chamber,

a secondary stack of filtering elements contained in another of said chambers, called secondary chamber, the said main and secondary stacks forming a common bore, an inner ring provided in said bore, the filtering elements of the main and secondary stacks having an outer circumference and between said common bore and said outer circumference, each said filtering element being divided into a plurality of sections isolated from one another, there being orifices in said ring for communicating each said section of said filtering element with said bore and said outer circumference,

a shut-off distribution valve co-operating with and rotatable in said bore having an axis common to any one said filtering element of said main stack said stacks of filtering elements, a main groove in said distribution valve which in a first position of said distribution valve isolates one said section of from another said section of the same said filtering element and communicates with said one section of said filtering element through the orifice connecting said one section with the said bore, said distribution valve also having a secondary groove which in a second position of said distribution valve isolates one said section of any one said filtering elements of said secondary stack from other said sections of said secondary stack of filtering elements, said secondary groove communicating with said one section of said secondary stack of filtering elements in said second position, characterised in that said main groove of the distribution valve is connected to said secondary groove of said distribution valve by means of a duct in said distribution valve; a connecting duct in the body of said valve between the main chamber and secondary chamber connecting said bore with said secondary chamber, said distribution valve in said second position closing said connecting duct where said connecting duct opens out into said bore, whereby communication between said main and secondary chambers through said connecting duct is blocked.

Compl. Specn. 13 pages.

Drugs. 5 sheets.

CLASS : 80B.

162497

Int. Cl. B01d 37/00.

**"IMPROVED FILTER".**

Applicant : GEORGES MOATTI, a French Company, of 125, avenue Pierre Curie, 78210 Saint Cyr L' Ecole, France.

Inventors : JEAN CLAUDE MOATTI & THEOPHILE CHRISTOPHE.

Application for Patent No. 854/Del/84 filed on 7th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**2 Claims**

A filter for all purposes, particularly fuel oil, gazoil and/or lubricating oil, constituted by :

a filter body comprising of distinct chambers isolated from one another,

a main stack of filtering elements contained in one of said chambers, called main chamber, the main stack of filtering elements having a common bore and an inner ring in said bore each filtering element of the main stack having an outer circumference and between said common bore and said outer circumference the filtering element is divided into a plurality of sections isolated from one another, there being orifices in said inner ring for communication of each said section with said bore orifices also being provided in the outer circumference of each said filtering element,

a shut-off distribution valve co-operating with and rotatable in said bore said distribution valve having an axis common to that of said bore of said stack of filtering elements a main groove in said distribution valve which in a first position of said distribution valve isolates one said section of any one filtering element of said main stack from the other sections of said filtering element and of communicating with said first section through the orifice for communication of said one section, and

a discharge chamber connected to at least a duct inside the distribution valve and to a fluid evacuation union through a calibrated connecting duct, characterised in that a complementary duct connects the discharge chamber to said fluid evacuation union, said fluid evacuation union being in turn connected to a reservoir of fluid without pressure, a two-position valve being disposed in said complementary duct, such that in said first position of said valve, said complementary duct is closed against flow and, in a second position of said valve, said complementary duct ensures free communication between said discharge chamber and said unpressurised reservoir.

Compl. Specn. 13 pages.

Drugs. 5 sheets.

CLASS : 83A<sub>2</sub>

162498

Int. Cl. : A23c 9/00 & 11/00.

**"PROCESS OF MANUFACTURING A PALATABLE PEANUT MILK".**

Applicant : THE COCA COLA COMPANY, a corporation organised under the laws of the State of Delaware, United States of America, of P. O. Drawer 1734, Atlanta, Georgia 30301, United States of America.

Inventors : GEORGE L. K. HUNTER, SHIN SHYONG CHANG & TROY GRIFFIN BRAWLEY.

Application for Patent No. 902/Del/84 filed on 27th November, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**8 Claims**

A method of making a palatable peanut milk having a pleasant light peanut flavor comprising the steps of :

partially roasting blanched partially defatted raw peanuts to yield a roasted peanut;

grinding said roasted peanuts into a flour, said flour having a color indication of between 60 to 74 in a Gardner L Scale, said color indication being related to the degree of roast of the roasted peanut;

adding between 5.0 to 6.0% by weight of peanut flour to between 94.0 to 95.0% by weight of water to form a flour and water slurry;

extracting as herein described protein from the flour in said flour and water slurry;

homogenizing as herein described said water flour suspension to form a homogenized peanut milk product, and if desired separating large undissolved solids from said homogenized milk products by any known manner.

Compl. Specn. 24 pages.

Drugs. 3 sheets.

CLASS : 189.

162499

Int. Cl. : A61k 7/16.

**"A DENTIFRICE COMPOSITION".**

Applicant : COLGATE PALMOLIVE COMPANY, a corporation organized under the laws of the State of Delaware, U. S. A. of 300 Park Avenue, New York, New York 10022, United States of America.

Inventors : PATRICIA SUSAN MULVEY, JORDON B BARTH & LINDA JOY VELLEKOOP.

Application for Patent No. 923/Del/84 filed on 10th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 11 Claims

A dentifrice composition comprising 20—80% by weight of an aqueous humectant vehicle, 0.1—5% by weight of gelling agent and 10—75% by weight of polishing agent, said polishing agent being selected from di-calcium phosphate and a siliceous polishing agent such as herein described, said gelling agent being selected from *l*-carrageenum or a mixture of *l*-carrageenan and a cellulosic gelling agent such as herein described, the weight ratio of *l*-carrageenan to the cellulosic gelling agent being in the range of from 99 : 1 to 1 : 3.

Compl. Specn. 28 pages.

CLASS : 129G. 162500

Int. Cl. : B23p 19/00.

**"APPARATUS FOR MAKING A CONTINUOUS TUBULAR STRUCTURE".**

Applicant : COFLEXIP, A FRENCH COMPANY, OF 23, AVENUE DE NEUILLY, 75116, PARIS, FRANCE.

Inventors : LUCIEN LEGALLAIS & BENNARD KUNTZ.

Application No. 945/Del/84 filed on 18th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 6 Claims

Apparatus for making a continuous tubular structure of interlocked helically wound strip comprising, a circular plate driven in rotation in one direction around a horizontal axis substantially coinciding with the longitudinal axis of the tubular structure which is formed, said plate having a first side and a second side, support means mounted on said first side of the plate for supporting a supply reel of flat strip, an assembly of driven shaping rollers mounted on said first side of the plate to drive the strip and to form the flat strip into a profiled strip of basically S- or Z-shaped cross-section, means mounted on said first side of the plate between the supply reel and the assembly of shaping rollers for guiding the flat strip from the reel to the shaping rollers, a tubular mandrel coaxial with and on said first side of the plate and onto which the profiled strip from the shaping rollers is helically wound, means for rotating the mandrel in a direction opposite to the direction of rotation of the circular plate, longitudinal extraction means positioned downstream of the plate for withdrawing the tubular structure as it is formed, and for directing the formed structure toward a receiving station downstream of the extraction means, a plurality of idler pressure rollers mounted on said first side of the plate and circumferentially spaced around said mandrel, said pressure rollers pressing the profiled strip from the shaping rollers against the mandrel, said pressure rollers pressing against the helically wound profiled strip to interlock successive turns of the strip and to drive the helically wound structure axially in a direction downstream of the circular plate.

Compl. Specn. 14 pages.

Drgs. 2 sheets.

CLASS : 141 B 162501

Int. Cl. C01f 7/20 & C22b 1/00.

**"PROCESS FOR RECOVERING OF ALUMINOUS BASED REFRACTORY MATERIAL, FERRIC CHLORIDE HYDROCHLORIC ACID".**

Applicant : COMALCO ALUMINIUM LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF VICTORIA, OF 95 COLLINS STREET, MELBOURNE, IN THE STATE OF VICTORIA, COMMONWEALTH OF AUSTRALIA.

Inventors : WILLIAM HENRY ANDREWS, DAVID JOHN MINE RONALD WILLIAM MOYLE & JAMES PHILIPS PETERS.  
2—97 GI/88

Application for Patent No. 306/Del/82 filed on 15th April, 1982.

Convention date 29th April, 1981/PE 8629/(Australia).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 7 Claims

A process for recovering alumina-based refractory material, ferric chloride and hydrochloric acid by treating an aluminous material such as herein described, which comprises the steps

(a) mixing crushed uncalcined said aluminous material having a maximum particle size of 1mm with dilute hydrochloric acid solution of concentration of the order of 20% HC1, which may also contain dissolved chlorides of iron and/or aluminium, to form a slurry, the quantity of hydrochloric acid used being sufficient to dissolve at least 80% of the iron present in the said aluminous material but not more than that required to dissolve 120% of said iron;

(b) heating the slurry to a temperature in the range of 70° to 110°C for a time sufficient to leach the majority of the iron present in the said aluminous material;

(c) filtering the slurry to produce a filtrate containing chlorides and a filter cake comprising aluminous material of reduced iron content;

(d) calcining the aluminous material from step (c) at a temperature in the range 1600° to 1750°C to produce the alumina-based refractory material;

(e) treating filtrate from step (c) with an oxidising agent such as herein described to convert ferrous chloride to ferric chloride;

(f) contacting the liquor from step (e) with fresh crushed said aluminous material whereby aluminium is dissolved and iron compounds are precipitated;

(g) filtering the product of step (f) to produce a solution containing aluminium hydroxy chlorides;

(h) heating the solution from step (g) to an elevated temperature to alumina, and gases containing hydrochloric acid;

(i) absorbing said gases in an aqueous medium to produce a solution containing hydrochloric acid which is separated in a known manner and recycled to step (a).

Compl. Specn. 23 pages.

Drgs. 3 sheets.

CLASS : 28 G. 162502

Int. Cl. : F23d 3/08.

**A WICK FOR USE IN A KEROSENE WICK STOVE.**

Applicant : NIKY TASHA INDIA PVT. LTD., OF B 1 & 2 MAHAJAN HOUSE, NDSE, NEW DELHI, INDIA, AN INDIAN COMPANY.

Inventors : RITU NANDA & LADU RAM CHAUDHARY.

Application for Patent No. 436/Del/84 filed on 28th May, 1984.

Complete specification left on 28th August, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 2 Claims

A wick for use in a kerosene wick stove comprising a tubular member of a fabric woven out of yarn made of fibres having capillary action on liquids characterised in that a fabric of a flame resistant material namely fibre glass or asbestos is provided on one of its ends which is to be disposed immediately below the burner of the stove.

(Provisional specification 5 pages.)

(Complete specification 5 pages).

CLASS : 180.

162503

Int. Cl. : F24c 5/04.

## A KEROSENE WICK STOVE ASSEMBLY.

Applicant : NIKY TASHA INDIA PVT. LTD. OF F. 1 & 2 MAHAJAN HOUSE NDSE, NEW DELHI, INDIA, AN INDIAN COMPANY.

Inventors : RITU NANDA & LODU RAM CHAUDHARY.

Application for Patent No. 437/Del/84 filed on 28th May, 1984.

Complete specification left on 28th August, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

A kerosene wick stove assembly comprising a body having two or more openings on its top provided with supporting means for supporting the vessels, a fuel tank within said body provided with two or more wick assemblies and burner assemblies, each wick assembly having a fixed outer casing and a vertically moveable inner casing surrounding a plate and a tubular wick fitted around a stationary pipe closed at the upper end and extending upwardly from the base of the said fuel tank, said plate having a rack formed of teeth and a rack and pinion device actuatable by a knob for rising or lowering the wick, each burner assembly having a tubular casing within which is provided a perforated outer sleeve and an inner perforated sleeve having on its top a flame deflector, the said outer and inner sleeves on their lower ends rest on the said fixed outer casing and said upper end of stationary pipe respectively.

(Provisional specification 6 pages).

(Complete specification 10 pages Drawing 4 sheets)

CLASS : 139 A.

162504

Int. Cl. : C01b 31/04.

AN IMPROVED PROCESS FOR THE PREPARATION OF PURIFIED COLLOIDAL GRAPHITE HAVING 0.1 TO 2 MICRON PARTICLE SIZE.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA. AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : JAYARAM LAXMANRAO GUMASTE, RAMCHANDRA KRISHNARAO GALGALI & BISHNU CHARANARABIND MOHANTI.

Application for Patent No. 634/Del/84 filed on 7th August, 1984.

Complete specification left on 4th October, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 4 Claims

An improved process for the production of purified colloidal graphite having 0.1 to 2 micron particle size which comprises ball milling artificial/natural graphite to -200Y to +325 mesh, leaching the ground graphite powder with an acid and wet grinding the leached graphite using surfactant characterised in that the graphite employed is the reject electrode graphite, in that the ground graphite powder is leached with 25% aqua regia for about 12 hours, and in that the wet grinding is effected in a high impact Vibro energy mill having forced vibration of 40-60 c/s and amplitude of 1-2 mm in a colloidion frequency of 0.1 mega cycles, to provide slurry, and thereafter diluting the slurry with water and separating the colloidal graphite in the form of suspension, and if desired, coagulating the

colloidal suspension with a coagulating agent, filtering the coagulum and drying the filtrate by conventional methods.

(Provisional specification 5 pages).

(Complete specification 8 pages).

CLASS : 144 A &amp; E.

162505

Int. Cl. : C09d 3/48.

## A PROCESS OF COATING A SURFACE OF AN ARTICLE.

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC., OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3 JF, ENGLAND, A BRITISH COMPANY.

Inventors : ANDREW DOROSZKOWSKI & MAURICE WAINWRIGHT SKINNER.

Application for Patent No. 13/Del/85 filed on 10th January, 1985.

Convention date 27th January, 1984/8402191/(U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 10 Claims

A process of coating a surface of an article which is capable of being heated, by contacting the heated surface of the article with a coating composition comprising an aqueous dispersion of an organic film forming material of the kind such as herein described which is sterically stabilised and which has a critical coalescence temperature such as herein defined which is lower than the temperature to which the surface of the article is heated, so that the film forming material is destabilised.

(Complete specification 25 pages).

CLASS : 48D, 64B.

162506

Int. Cl. : H01r 7/00.

## A CONNECTOR FOR ELECTRICAL OR OPTICAL FIBRE CABLES.

Applicant : ALLIED CORPORATION, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK U.S.A., OF CALUMBIA ROAD AND PARK AVENUE, MORRIS TOWNSHIP, MORRIS COUNTY, NEW JERSEY, UNITED STATES OF AMERICA.

Inventor : BRIAN MITCHELL.

Application for Patent No. 17/Del/85 filed on 11th January, 1985.

Convention date 16th February, 1984/8404107/(U.K.).

Appropriate Office for Opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 6 Claims

A connector for electrical or optical fibre cables said cables having a terminating member at one end thereof and a grommet mounted in said connector to seal said cable after said terminating member is inserted therethrough,

said grommet comprising a body having a cylindrical inner wall and at least one annular sealing web of resilient material extending radially inwardly from said inner wall and having a substantially conical configuration normally facing in one axial direction, said web having a central bore having a cylindrical substantially flat surface coaxial with the inner wall having two substantially flat surfaces each extending from said wall at a different angle than the other and terminating at said substantially flat sealing surface and surrounding said bore, the thickness of said web

extending axially of said bore and radially inwardly from the inner wall being greater adjacent to the cylindrical sealing surface than the thickness of said web adjacent to said inner wall of said flat surfaces extending at said different angles so that said web is deformable axially adjacent to said inner wall to permit the passage of a terminating member of relatively large cross-section through said bore in a first axial direction and in a second, opposite axial direction and inversion of the cone if the web is pulled from one of said first or second axial directions to the other of said first or second axial directions, and said cylindrical sealing surface coaxially expands radially outwardly and sealingly engage 360° of an axial portion of a cable of relatively small or large cross-sectional diameter.

(Complete specification 12 pages

Drawing 2 sheets)

CLASS : 74.

162507

Int. Cl. : A47g 27/02.

## RAIN WATER DRAINAGE TRAY FOR COIR DOOR MAT.

Applicant & Inventor : DAVID NICHOLLS, AN AUSTRALIAN CITIZEN, OF 10 WINTERTON DRIVE, GLEN WAVERLEY, VICTORIA 3150, AUSTRALIA.

Application for Patent No. 99/Del/85 filed on 7th February, 1985.

Appropriate Office for Opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 4 Claims

A rain water drainage tray for a coir door mat, the tray comprising a flat rectangular shaped bottom for supporting a coir door mat and draining surface with mat-retaining, continuous side walls or flanges, upstanding from the periphery thereof and at least at two opposite corners thereof, the dimensions of the bottom and walls or flanges being sufficient to retain a standard coir door mat in place upon the tray, both end walls being elevated to form foot scrapers, the top edge of each end wall having an outwardly and downwardly disposed handgrip flange formed therein, the said bottom having a plurality of water drainage apertures extending there-through, the bottom surface of the tray having a plurality of projections extending therefrom for raising the tray above the ground level to facilitate drainage and aeration of a wet coir door mat placed upon the tray and to support the weight of a user.

Complete Specification 5 pages

Drawing Sheets 2)

CLASS : 46 B.

162508

Int. Cl. : G07f 11/00.

## BATTERY VENDING MACHINE.

Applicant : PEAKMICRO LIMITED, A BRITISH COMPANY, OF 7 GREAT JAMES STREET, LONDON W1N 3DA, ENGLAND.

Inventor : JOHN LEONARD MOORE.

Application for Patent No. 118/Del/85 filed on 13th February, 1985.

Convention date 22nd February, 1984/8404689/(U.K.)

Appropriate Office for Opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 15 Claims

A battery vending machine comprising a control unit and, in sequence, an input section for receipt of a used battery and which has a battery identification unit incorporating a sensing head, connected to said control unit,

said sensing head checks for acceptable batteries inserted into the machine, a charging unit which is connected to the input section to receive acceptable batteries therefrom, the charging unit having a charging circuit connected to electrodes which are movable into electrical contact with the batteries to charge them to a predetermined high charge level, and a battery dispensing unit at the outlet of the charging unit for dispensing another charged battery from the machine through a discharge flap whose state is controlled by activating signals from the control unit and the identification unit, the charging unit output being connected to the input of the battery dispensing unit to define a continuous path through which recharged batteries will pass.

(Complete specification 20 pages

Drawing 3 sheets)

CLASS : 141 B.

162509

Int. Cl. : C01f 7/20 &amp; C22b 1/00.

## PROCESS FOR TREATMENT OF BAUXITE.

Applicant : COMALCO ALUMINIUM LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF VICTORIA, OF 95 COLLINS STREET, MELBOURNE, IN THE STATE OF VICTORIA, COMMONWEALTH OF AUSTRALIA.

Inventors : WILLIAM HENRY ANDREWS, RONALD WILLIAM MOYLE, JAMES PHILLIPS PETERS & DAVID JOHN MILNE.

Application for Patent No. 531/Del/85 filed on 8th July, 1985.

Convention date 29th April, 1981/PE8629/(Australia).

Divisional to patent application No. 306/Del/82 filed on 15-4-82.

Appropriate Office for Opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

## 5 Claims

Process for treatment of bauxite to reduce the iron content thereof and to produce metallurgical grade alumina, which comprises the steps :—

(a) reacting crushed bauxite having a maximum particle size of 1 mm with 20 to 30 weight percent aqueous aluminium chloride solution in the proportion of between 22 and 7 of solution to 1 of bauxite by weight, at a temperature in the range 120° to 240°C, whereby alumina and iron are extracted;

(b) filtering the product of step (a) to produce a solution containing basic aluminium chlorides;

(c) evaporating and crystallizing the solution from step (b) to produce crystalline aluminium compounds; and

(d) calcining the crystalline product from step (c) at a temperature in the range 800° to 1100°C to produce metallurgical grade alumina and gaseous hydrochloric acid.

(Complete specification 16 pages Drawing 3 sheets).

CLASS : 141 B.

162510

Int. Cl. : C01f 7/20 &amp; C22b 1/00.

"PROCESS FOR TREATMENT OF BAUXITE TO REDUCE THE IRON CONTENT THEREOF AND TO PRODUCE A BRIQUETTED ALUMINA RICH MATERIAL".

Applicant : COMALCO ALUMINIUM LTD., A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF VICTORIA, OF 95 COLLINS STREET, MELBOURNE, IN THE STATE OF VICTORIA, COMMONWEALTH OF AUSTRALIA.

Inventors : WILLIAM HENRY ANDREWS, RONALD WILLIAM MOYLE, JAMES PHILLIPS PETERS & DAVID JOHN MILNE.

Application for Patent No. 622/Cal/85 filed on 31st July, 1985.

Convention date 29th April, 1981/PE 8629/(Australia).

Divisional to Patent Application No. 306/Cal/82 filed on 15-4-82.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 7 Claims

Process for treatment of bauxite to reduce the iron content thereof and to produce an alumina-based refractory material, which comprises the steps :

- (a) mixing crushed uncalcined bauxite having a maximum particle size of 1mm with dilute hydrochloric acid solution of concentration of the order of 20% HCl, which may also contain dissolved chlorides of iron and/or aluminium, to form a slurry, the quantity of hydrochloric acid used being sufficient to dissolve at least 80% of the iron present in the bauxite but not more than that required to dissolve 120% of said iron;
- (b) heating the slurry to a temperature in the range of 70° to 110°C for a time sufficient to leach the majority of the iron present in the bauxite;
- (c) filtering the slurry to produce a filtrate containing chlorides and a filter cake comprising aluminous material of reduced iron content;
- (d) treating filtrate from step(c) with an oxidising agent to convert ferrous chloride to ferric chloride;
- (e) contacting the liquor from step(d) with fresh crushed bauxite whereby aluminium is dissolved and iron compounds are precipitated;
- (f) filtering the product of step(e) to produce a solution containing aluminium hydroxychlorides;
- (g) heating the solution from step(f) to an elevated temperature to hydrolyse the aluminium chloride to alumina, and produce gases containing hydrochloric acid;
- (h) absorbing said gases in an aqueous medium to produce a solution containing hydrochloric acid which may be recycled to step(a);
- (i) adding alumina produced in step(g) to the aluminous material produced in step(c) thereby raising the alumina content of the product;
- (j) drying and briquetting the product of step(i);
- (k) calcining the briquettes produced in step(j) at a temperature in the range 1600° to 1750°C to obtain the briquetted alumina rich material.

Compl. Specn. 22 pages. Drgs. 2 sheets.

CLASS : 162511

Int. Cl. : B 63 b 35/00; C 04 b 28/00.

#### CONCRETE BLOCKS FOR USE UNDERWATER FOR ALGAL CULTURE.

Applicant : TOKYU MUSASHI MANUFACTURING CO. LTD., OF 1-21-2 DOHGENZAKA, SHIBUYA-KU, TOKYO 150, JAPAN.

Inventor : 1. TETSUDO SUZUKI.

Application No. 1225/Cal/83 filed October 4, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 8 Claims

A concrete block suitable for use underwater as a reef for the growth of algae, characterised in that the block (1) is provided with an iron sulfate in a form which neutralises alkali leached from the concrete.

Compl. Specn. 24 pages.

Drgs. 10 sheets

CLASS : 5-D.

162512

Int. Cl. : A 01 g 29/00.

#### METHOD AND APPARATUS FOR MAKING NITRIC ACID SOLUTION.

Applicant & Inventor : JOHN ALVIN EASTIN, OF P. O. BOX 389, GRANT, NEBRASKA 69140 U. S. A.

Application No. 132/Cal/84 filed February 23, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 2 Claims

A method of making nitric acid solutions comprising oxidizing between 12.5 pounds and 146 pounds of nitrogen each hour in a continuous process by burning ammonia; bringing the nitrogen oxides into contact with an 8 percent nickel stainless steel mesh surface catalyst and with flowing water at a rate in the range of five gallons per minute to twenty gallons per minute in a continuous process as the nitrogen oxides are being formed to form a dilute solution of nitric acid.

Compl. Specn. 36 pages.

Drgs. 2 sheets.

CLASS : 84-C.

162513.

Int. Cl. : C 10 1 1/32.

#### A PROCESS FOR PREPARATION OF STABLE COAL-WATER MIXTURES.

Applicant : CENTRO SVILUPPO MATERIALI S.p.A. FORMERLY CALLED CENTRO SPERIMENTALE METALLURGICO S.p.A., OF VIA DI CASTELROMANO, 00129 ROME, ITALY.

Inventors : 1. LUIGI PALUMBO, 2. GIAN SILVIO MALGARINI.

Application No. 206/Cal/84 filed March 29, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims

Process for the preparation of stable coal-water mixtures suitable for use as fuel, in which there is between 70% and 80% coal (by weight), wherein in the coal is ground together with the water in the proportions desired for the final mixture, plus a small quantity of known fluidizing agents amounting to between 0.05 and 2% (by weight), the grinding being carried to the point where the harmonic mean diameter of the coal particles is around 50  $\mu$ m, at least 60% of the coal particles should be finer than 74  $\mu$ m, while less than 10% should be coarser than 250  $\mu$ m.

Compl. Specn. 12 pages.

Drg. Nil.

CLASS : 195-D.

162514

Int. Cl. : F 16 k 31/02, 31/06.

#### SOLENOID VALVE.

Applicant : SEALED POWER CORPORATION, OF 100 TERRACE PLAZA, MUSKEGON, MICHIGAN 49443, UNITED STATES OF AMERICA.

Inventor : 1. FRANK GWENN WARRICK.

Application No. 445/Cal/84 filed June 26, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

16 Claims.

A normally closed solenoid valve comprising a valve housing including.

- (a) a first transverse wall of magnetic material,
- (b) an integral extension of magnetic material extending axially from said first transverse wall.
- (c) an annular peripheral wall of magnetic material extending axially from the periphery of the first transverse wall in a direction opposite to the direction in which the axial extension extends,
- (d) a pole member of magnetic material including a pole piece extending axially inwardly of the housing and
- (e) a second transverse wall integral with and extending radially outwardly from the pole member into engagement with the peripheral wall and connected thereto,

said pole piece having an axial passage therethrough

said pole piece defining a first seat,

said first transverse wall and said axial extension of said housing having an axial passage aligned with the passage of said pole piece,

- (f) an insert of non-magnetic material positioned in said axial passage in said axial extension and having an axial passage, said insert defining a second seat,

- (g) a ball of magnetic material interposed between the first and second seats and having limited movement between said seats and extending into said axial passage in said first transverse wall and said axial extension with a close fit to optimize the magnetic circuit,

said axial passage in said pole piece having a narrow portion forming the first seat, said narrow portion is reduced in cross section as compared with the remainder of the passage.

spring means comprising a spring positioned in said axial passage of said pole piece and having projection yielding urged by said spring through said narrow portion of the axial passage to yieldingly urge said ball into engagement with the second seat.

said housing and pole member defining an annular space,

said insert having at least portions thereof spaced from the walls of the axial passage of the extension into which said insert extends defining passage communicating with the exterior of the axial extension,

a coil assembly in said annular space, such that when fluid is applied to the axial passage in said insert and the coil is de-energised, said spring means holds the ball against the second seat and prevents flow through said axial passages in said insert while permitting communication between the passages defined by the insert space from the walls of axial extension about the ball and first seat through the axial passage in the pole piece, and when the solenoid is energized, the ball is drawn toward the first seat to close communication to the axial passage in the pole piece and permit flow from the axial passage

in the insert about the ball past the second seat and through the passages defined by the insert to the exterior of the axial extension.

Compl. Specn. 14 pages.

Drgs. 3 sheets.

CLASS : 40-F.

162515

Int. Cl. : B 01 d 53/00.

A PRESSURE SWING METHOD FOR FRACTIONATING AT LEAST ONE COMPONENT GAS FROM A MIXTURE OF GASES BY SELECTIVE ABSORPTION AND APPARATUS FOR CARRYING OUT THE SAID METHOD.

Applicant : GREENE & KELLOGG, INC., AT 290 CREEKSIDE DRIVE, TONAWANDA, NEW YORK 14150, UNITED STATES OF AMERICA.

Inventors : 1. NORMAN RICHARD MCCOMBS, 2. RAVINDER KUMAR BANSAL.

Application No. 584/Cal/84 filed August 22, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

20 Claims

A pressure swing method for fractionating at least one component gas from a mixture of gases by selective adsorption in only a single adsorption zone and utilizing tank means to receive the output of said at least one component gas from said single adsorption zone, comprising the steps of operating said single adsorption zone between highest pressure, lowest pressure and intermediate pressure characterized in that during production step the pressures in said zone and in said tank means are increased from intermediate pressure to highest pressure during purge step the pressure in said zone is decreased from said highest pressure to said lowest pressure and during a pressure equalisation step pressure in said zone and in said tank means are equalised at said intermediate pressure by conventional method

Compl. Specn. 27 pages.

Drgs. 3 sheets.

CLASS : 9-D; 169-B.

162516

Int. Cl. : B 63 g 9/02; B 63 b 3/10; C 22 c 39/00, 41/00.

ARMOUR-PLATE AND PROCESS FOR ITS MANUFACTURE.

Applicant : THYSSEN STAHL AKTIENGESELLSCHAFT, OF KAISERWILHELM-STRASSE 100, D-4100 DUISBURG 11, WEST GERMANY.

Inventors : 1. HANS PIRCHER, 2. WERNER BENTZ, 3. ALFRED TEGETHOFF.

Application No. 745/Cal/84 filed October 23, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

12 Claims

Armor plate consisting of a two-layer bonded and subsequently heat-treated clad steel which, on the side facing the bombardment, consists of a hard top layer and the opposite side consists of a less hard base material, wherein :

- (a) the said top layer contains (in % by weight)
  - 0.30 to 0.80 % carbon
  - 0.10 to 0.80 % silicon
  - 0.40 to 1.20 % manganese
  - up to 0.015 % phosphorous
  - up to 0.015 % sulfur
  - 0.20 to 2.80 % chromium
  - 0.05 to 1.00 % molybdenum
  - 0.01 to 0.05 % aluminum
  - up to 0.40 % nickel
  - remainder iron including unavoidable impurities,

(b) the said base material contains (in % by weight)  
 0.17 to 0.40 % carbon  
 0.10 to 0.80 % silicon  
 0.40 to 2.00 % manganese  
 up to 0.025 % phosphorous  
 up to 0.025 % sulfur  
 0.10 to 1.50 % chromium  
 0.05 to 1.50 % molybdenum  
 0.01 to 0.05 % aluminum  
 remainder iron including unavoidable impurities  
 the carbon content of the said top layer being  
 remarkably higher than that of the said base  
 material.

Compl. Specn. 13 pages. Drg. Nil.

CLASS : 35-E. 162517

Int. Cl. : C 04 b 35/00.

**METHOD FOR THE MANUFACTURE OF HIGH ALUMINA GAS PERMEABLE REFRACTORY SHAPED ARTICLE.**

Applicant : DALMIA INSTITUTE OF SCIENTIFIC & INDUSTRIAL RESEARCH, AND ORISSA CEMENT LIMITED, BOTH OF RAJ GANGPUR-770 017, DIST.—SUNDARGARH, ORISSA, INDIA.

Inventors : 1. DR. JAGYADATTA PANDA, 2. DR. NILACHAL SAHOO, 3. SANJEEV AGARWAL.

Application No. 116/Cal/85 filed February 16, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**5 Claims**

A method for the manufacture of high alumina gas permeable refractory shaped article which comprises preparing a raw mix by mixing 70 to 95% by wt. of high purity dense alumina or mullite (alumina having more than 95% alumina and mullite having not less than 90% mullite and both having not more than 10% porosity) with 30 to 5% by wt. of a binding agent, intimately mixing the two ingredients with water to a mouldable consistency, moulding the wet mix into desired shapes, drying the shaped masses and firing the dried masses at 1600° to 1700°C. characterised in that (a) the said alumina or mullite has a grading which will pass through a sieve opening of y mm. and will retain on a sieve of x mm. opening, the difference between X and Y being not less than 0.1 mm. and not more than 0.5 mm. and the maximum diameter of the sieve opening in case of Y is 2 mm. and the maximum diameter of the sieve opening in case of X is not less than 0.1 mm., and (b) the said binding agent comprises 0.5 to 5% by wt. of an organic binder and 29.5 to 5% by wt. of a refractory material.

Compl. Specn. 5 pages. Drg. Nil.

CLASS : 39-E. 162518

Int. Cl. : C 01 b 33/04.

**A PROCESS FOR PRODUCING SILANE.**

Applicant : D. SWAROVSKI & CO., OF SWAROVSKI-STRASSE 36 A-6112 WATTENS-AUSTRIA.

Inventor : 1. DR. WOLFGANG PORCHAM.

Application No. 175/Cal/85 filed March 8, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**7 Claims**

A process for producing silane, characterized in that silicon tetrafluoride is reacted with magnesium hydride in a melt of alkali or alkaline earth halides under a

hydrogen partial pressure which is greater than the dissociation pressure of the magnesium hydride at the temperature of the melt.

Compl. Specn. 11 pages.

Drg. Nil.

CLASS :

2519

Int. Cl. : C 03 b 5/26.

**GLASS MELTER.**

Applicant : GAF CORPORATION, OF 1361 ALPS ROAD, WAYNE, NEW JERSEY 07470 (GAF), UNITED STATES OF AMERICA.

Inventors : 1. WILLIAM OTTO PEARMAN, 2. JOSEPH LINDSEY HUNT, 3. WILLIAM PATRICK CUNNINGHAM.

Application No. 459/Cal/85 filed June 21, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**14 Claims**

A glass melter comprising a melter body defining a containment chamber for receiving raw batch material, melting means in said chamber for heating said raw batch material to a molten glass state an outlet member for said melter body defining an outlet flow path and having an outlet opening of predetermined size, guide means inside said containment chamber but above said outlet member and insulated from said outlet member for directing the flow of molten glass to said outlet member, cooling means positioned so as to cool glass in said guide means electrical power means communicating directly with said outlet member such that said outlet member acts as a resistance and heats up in accordance with the amount of electric power furnished by said power supply means to said outlet member, and temperature control means communicating with said outlet member and said power supply means for controlling the amount of heat build up in said outlet member to control the viscosity of the molten glass along said outlet flow path and passing through said outlet opening, whereby the resistive heating of said outlet member is used without any flow restricting valves to control the outlet flow rate of said molten glass from said melter body.

Compl. Specn. 23 pages.

Drgs. 4 sheets.

CLASS : 172-E & F.

162520

Int. Cl. : B 65 h 54/00, 59/00.

**IMPROVEMENTS IN OR RELATING TO WINDING EQUIPMENTS FOR WINDING YARN.**

Applicant : FRANZ XAVER HUEMER, OF SONNENHURGASSE 4, 1060 VIENNA, AUSTRIA.

Inventor : 1. FRANZ XAVER HUEMER.

Application No. 560/Cal/85 filed July 31, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**5 Claims**

A winding equipment for winding yarn which comprises :

a winder frame;

a bobbin shaft journaled on said frame and carrying a bobbin upon which a yarn is to be wound;

a driven plate mounted on an end of said bobbin shaft;

an electric motor having a drive shaft parallel to said bobbin shaft;

a drive plate on said drive shaft juxtaposable with said driven plate and magnetically couplable therewith to rotate said bobbin when said motor is energized, one of said plates being provided with permanent magnets, the other of said plates being composed of a magnetically permeable material for magnetic coupling with said permanent magnets;

support means for pivotally mounting said drive shaft for angular displacement about a pivot axis parallel to said shafts but offset from said drive shaft to displace said drive plate generally radially with respect to said driven plate to vary the magnetic coupling between said plates;

a dancing arm swingably mounted on said frame and provided with a dancing roller about which a loop of said yarn passes and forming a yarn-tension detector; and

means coupling said arm with said support means for swinging said drive shaft about said pivot axis to decrease said magnetic coupling by a said generally radial displacement of said drive plate in one direction upon an increase in yarn tension and to increase said magnetic coupling by a reverse generally radial displacement of said drive plate.

Compl. Specn. 13 pages.

Drgs. 1 sheet.

CLASS : 27 I.

162521

Int. Cl. : F16s 51/00, 5/00.

**"A COMPOSITE PANEL STRUCTURE".**

Applicant : HARDIGG INDUSTRIES, INC., a corporation organised under the laws of the State of Massachusetts, United States of America, of South Deerfield, State of Massachusetts, United States of America.

Inventor : JAMES SUTTON HARDIGG.

Application for Patent No. 557/Del/83 filed on 16th August, 1983.

Divisional to Patent Application No. 941/Del/79 filed on 24th December, 1979.

Appropriate Office for Opposition proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**20 Claims**

A composite panel structure comprising at least one truss member having spaced apart top and bottom surfaces each composed of a plurality of individual spaced apart contact elements lying in the same plane, each of said planes defining the said surfaces, at least one structural member having a neutral axis secured to one of said surfaces of said truss member, the contact elements forming one of said surfaces being offset from those forming the other surface, strut means extending from one surface to the other and arranged obliquely to one another for joining the contact elements in one surface with predetermined contact elements in the other, said strut means including a plurality of individual struts extending from each said contact element on one surface toward a like plurality of contact elements on the other surface so that the axes of each of said strut means joining a contact element intersect substantially at the neutral axis of said at least one structural member secured thereto.

Compl. Specn. 36 pages.

Drgs. 8 sheets.

CLASS : 32F.

162522

Int. Cl. : C07c 27/00, 37/00.

**"AN IMPROVED PROCESS FOR THE PREPARATION OF TETRABROMOBISPHENOL A".**

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-110 001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventors : MUKESH MAHENDRA PANDYA, RAJESH POPATLAL PANDYA, JETHALAL KESHAVLAL LANJALI, PRAFULLA RAMNIKRAI MEHTA, JITENDRA RAMANLAL SANGHAVI & MIRZA MOHAMAD TAQUI KHAN.

Application for Patent No. 928/Del/84 filed on 10th December, 1984.

Complete specification left on 5th December, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

**5 Claims**

An improved process for the preparation of tetra bromobisphenol A by reacting bisphenol A with bromine in the presence of aqueous lower alkanol solvent between a temperature of about 0 to 50°C characterised in that the reaction is conducted in the presence of a catalyst selected from FeCl<sub>3</sub>, NiCl<sub>2</sub> & CoCl<sub>2</sub>.

Provl. Specn. 4 pages.

Compl. Specn. 6 pages.

CLASS : 27 I.

162523.

Int. Cl. : C06b 15/00.

**DEVICE FOR INHIBITING THE END-FACES OF A BLOCK OF PROPELLANT.**

Applicant : SOCIETE NATIONALE DES POUDRES ET EXPLOSIFS, A FRENCH COMPANY OF 12, QUAI HENRI IV-75181 PARIS CEDEX 04-FRANCE.

Inventors : ANDRE HISS, MICHEL HIVERT & JEAN-MICHEL TAUZIA.

Application for Patent No. 931/Del/84 filed on 11th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

**8 Claims**

Device for inhibiting the end-faces of a block of propellant with a polymerizable inhibiting compound such as herein described, comprising a mold and means for pouring the inhibiting compound in said mold, characterized in that the mold has on its upper face a hollow which is a trough which matches the face of said block to be inhibited and the depth of said trough is equal to the thickness of the inhibiting layer to be formed, said means for pouring the inhibiting compound having a head ensuring distribution of said inhibiting compound in said trough, said distributing head consisting of a distribution tube the end of which is in a shape of a flattened flare with width of said flare being slightly less than that of said trough.

Compl. Specn. 16 pages.

Drgs. 2 sheets.

CLASS : 92 D.

162524

Int. Cl. : A23b 9/00.

**A PROCESS FOR COATING SEEDS.**

Applicant : INTEROX OF 33, RUE DU PRINCE ALBERT, B-1050 BRUSSELS, BELGIUM, A BELGIAN COMPANY.

Inventors : IGNACE GAGO & RENE DETROZ.

Application for Patent No. 938/Del/84 filed on 12th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## 10 Claims

A process for coating seeds characterised by applying to said seeds an anhydrous coating agent consisting of peroxy compound of the kind such as herein described and a solution of a polyester of the kind such as herein described in an organic solvent such as herein described.

Compl. Specn. 17 pages.

CLASS : 55 F. & 128 F.

162525.

Int. Cl. A61j 3/00 & B32b 33/00.

**PROCESS FOR THE PRODUCTION OF A LAMINATE FOR THE CONTROLLED AND PROLONGED RELEASE OF AT LEAST ONE ACTIVE AGENT TO AN AMBIENT ENVIRONMENT.**

Applicant : PFIZER INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 235 EAST 42ND STREET, NEW YORK, STATE OF NEW YORK, UNITED STATES OF AMERICA.

Inventor : JOHN ROBERT CARDINAL.

Application for Patent No. 965/Del/84 filed on 27th December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## 12 Claims

Process for production of a laminate for the controlled and prolonged release of at least one active agent as herein defined to an ambient environment characterised in that

at least one core sheet comprising a mixture of said active agent and a polymer matrix is laminated between coextensive polymeric films which are substantially impermeable to said environment and to said agent,

and then making one or a plurality of macroperforations through said films and said core sheet,

the diameter and arrangement of said macroperforations in relation to the thickness of said core sheet being predetermined so that sufficient interior edge area of said sheet is exposed to said environment to afford the desired release rate of said agent.

Compl. Specn. 54 pages.

Drg. 3 sheets.

CLASS : 40E & F & 182 B.

162526.

Int. Cl. : B01d 57/00 & C13k 1/00, 9/00.

**PROCESS FOR SEPARATING AN EXTRACT COMPONENT FROM A RAFFINATE COMPONENT.**

Applicant : UOP INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE IN THE UNITED STATES OF AMERICA, WITH ITS PRINCIPAL PLACE OF BUSINESS LOCATED AT TEN UOP PLAZA, ALGONQUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS 60016, U.S.A.

Inventor : ANIL RAJARAM OROSKAR.

Application for Patent No. 81/Del/85 filed on 2nd February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## 6 Claims

A process for separating an extract component from a raffinate component contained in a feed mixture such as herein described comprising the steps of :

- (a) maintaining a unidirectional fluid flow through a series of separating units in which said components have differential rates of travel due to selective retardation or acceleration of each of said components in each of said unit, each of said units having a fluid inlet and a fluid outlet, said separating units being interconnected so as to achieve serial flow through said units in a single closed loop;

(b) mixing said feed mixture with the fluid emanating from one of said fluid outlets and passing the resultant first mixture into the next inlet downstream of said outlet in said series and mixing a displacement fluid such as herein described with the fluid emanating from another of said fluid outlets and passing the resultant second mixture into the next inlet downstream of said other outlet in said series;

(c) establishing within said separating units a component concentration distribution, zones of which comprise, sequentially progressing in the direction of fluid flow, extract and raffinate component mixture with the proportion of the raffinate component to extract component being greater than in the feed mixture, extract and raffinate component mixture with the proportion of extract component to raffinate component being greater than in the feed mixture, concentrated extract component, extract component diluted with said displacement fluid, raffinate component diluted with said displacement fluid and concentrated raffinate component;

(d) withdrawing as an extract product stream a portion of at least one of the streams between an adjacent pair of separating units, and withdrawing as a raffinate product stream a portion of at least one other of the streams between a different adjacent pair of separating units, the selection of the streams from which said product streams are withdrawn being consistent with the desired composition of each of said product streams;

(e) periodically simultaneously shifting in an upstream direction with respect to fluid flow in said separating units, all of said inlets and outlets to effect the shifting of zones in a downstream direction with respect to said fluid flow, said shifting being effected prior to the progression through said units of said component concentration distribution to the extent that the composition of the inlet or outlet streams to or from any zone becomes inconsistent with the desired composition of that zone.

Compl. Specn. 35 pages.

Drg. 10 sheets.

CLASS : 32 E.

162527

Int. Cl. : C08F 3/18.

**A POLYVINYL CHLORIDE—ACRYLONITRILE BUTADIENE STYRENE COPOLYMER BLEND.**

Applicant : SHRI RAM INSTITUTE FOR INDUSTRIAL RESEARCH, 19, UNIVERSITY ROAD, DELHI-110 007, INDIA, AN INDIAN INSTITUTE.

Inventors : UPENDRA KUMAR SAROOP, NEERAJ KUMAR GUPTA & KRISHNA KUMAR JAIN.

Application for Patent No. 241/Del/85 filed on March 22, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

## 6 Claims

A polyvinyl chloride and acrylonitrile butadiene styrene copolymer blend comprising a mixture of polyvinyl chloride and acrylonitrile butadiene styrene copolymer characterized in that : said copolymer has a butadiene content of 10 to 50% and in that said mixture also consists of 5 to 25% by weight (of the polyvinyl chloride copolymer mixture) a plasticizer such as herein described, 5.0 to 50% by weight of a filler such as herein described and other known additives.

Compl. Specn. 8 pages.

CLASS : 153.

162528.

Int. Cl. : B24d 15/16 & B24h 41/00.

**POLISHING MACHINE WITH MOUNTING ARRANGEMENT FOR A GRINDSTONE IN THE CHUCK OF THE POLISHING MACHINE.**

Applicant : ABRASIVOS DE ESPANA, S.A., A SPANISH COMPANY, OF TORRENTE DEL RAMASA, 29-31, LES FRANQUESSES DEL VALLES, BARCELONA, SPAIN.

Inventors : FRANCISCO MANUEL RODRIGUEZ CARDAMA & RICARDO DUDE MARTIN.

Application for Patent No. 295/Del/85 filed on 8th April, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

13 Claims

A polishing machine with mounting arrangement for a grindstone in the chuck of polishing machine comprising a headstock (1) for retaining the grindstone (12), at least one rod (8) disposed to protrude beyond said headstock (1), said rod having a wide head (10), and a plate (13) forming the integral part of the grindstone comprising at least one flange (15) having a recess (17) thereunderneath, said flange receiving and retaining said wide head (10) of said rod (8) thereunder, whereby the grindstone and said headstock are connected to one another.

Compl. Specn. 13 pages.

Drg. 3 sheets.

CLASS : 32 E & 104 A.

162529.

Int. Cl. : C08c 1/00.

PROCESS FOR EXTRACTING RUBBER AND/OR RESIN FROM RUBBER CONTAINING PLANTS.

Applicant : THE FIRESTONE TIRE & RUBBER COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA, OF 1200 FIRESTONE PARKWAY, AKRON, STATE OF OHIO 44317, UNITED STATES OF AMERICA.

Inventors : EDWARD LEO KAY & RICHARD GUTIERREZ.

Application for Patent No. 345/Del/85 filed on 23rd April, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

13 Claims

A process for extracting rubber and/or resin from rubber containing plants comprising the steps of :

adding a monophase solvent to particles of the rubber containing plant, said monophase solvent comprising at least one hydrocarbon solvent, and at least one organic polar solvent, the amount of said hydrocarbon solvent ranging from 95 to 50 percent by weight and the amount of said organic polar solvent ranging from 5 to 50 percent by weight, and extracting the rubber and/or resin therefrom.

Comp. Specn. 21 pages.

CLASS : 128 G & 146 C.

162530

Int. Cl. : A61b 17/00.

A SHUNT VALVE FOR USE IN THE TREATMENT OF HYDROCEPHALIS.

Applicant & Inventor : GHANSHYAM DAS AGRAWAL, AN INDIAN NATIONAL OF BIRYAGANJ, SHAHJAHANPUR-242 001, U.P., INDIA.

Application for Patent No. 408/Del/85 filed on 15th May, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

5 Claims

A hydrocephalous shunt valve for use in the treatment of hydrocephalus comprising a housing a tube extending thereto from one end thereof, the distal end of said tube being

3-97GI/88

closed, at least one longitudinal slit valve formed in said tube, and a protective member surrounding said slit valve.

Comp. Specn. 6 pages.

Drg. 1 sheet.

CLASS : 47 B.

162531.

Int. Cl. : B01j 7/00, F23d 19/00 & F23r 1/14.

METHOD OF AND APPARATUS FOR GENERATING A HOT GAS.

Applicant : COAL INDUSTRY (PATENTS) LIMITED, A COMPANY ORGANISED IN ACCORDANCE WITH THE LAWS OF GREAT BRITAIN, OF HOBART HOUSE, GROSVENOR PLACE, LONDON SW1X 7AE, ENGLAND.

Inventor : ANDREW RICHARD BUTT.

Application for Patent No. 872/Del/84 filed on 16th November, 1984.

Convention date 6th December, 1983/8332506/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

27 Claims

A method of generating a hot gas comprising the steps of establishing a first fluidised bed of particulate material adjacent a second fluidised bed of particulate material, feeding coal to the first fluidised bed, partially gasifying the coal in said first fluidised bed to generate a combustible gas and char, circulating material between the first and second beds, burning the char in the second fluidised bed to generate oxygen rich gases mixing the combustible and oxygen rich gases downstream of the first and second beds, and burning the combustible gas in the oxygen rich gases to generate a hot gas product.

Compl. Specn. 15 pages.

Drg. 4 sheets.

CLASS : 188 & 194 B.

162532.

Int. Cl. : C23c 15/00.

PROCESS FOR COATING A THERMALLY RESISTANT SUBSTRATE AND ARTICLE PREPARED THEREFROM.

Applicant : THE PARKER PEN COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, OF ONE PARKER PLACE, JANESEVILLE, WISCONSIN 53545, UNITED STATES OF AMERICA.

Inventors : JAMES RICHARD SNYDER.

Application for Patent No. 971/Del/84 filed on 31st December, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

18 Claims

A process for coating a thermally resistant substrate of the kind such as herein described with first and second materials, the first material being a nitride of a refractory material such as herein described, and the second material being a precious metal or an alloy of the precious metal such as herein described comprising successively and alternately depositing non-opaque and non-interactive layers of the first and second materials on the substrate and then on one another, until a total of at least four of the layers has been deposited.

Compl. Specn. 27 pages.

Drgs. 2 sheets.

CLASS : 195 E

162533

Int. Cl. : F16k 17/00.

A GAS FLOW REGULATOR FOR INSTALLATION IN A GAS OR AIR CONDUIT.

Applicant : M & I HEAT TRANSFER PRODUCTS LIMITED, A CANADIAN COMPANY, OF 1375 AIMCO BOULEVARD, UNITS 9 & 10 MISSISSAUGA, ONTARIO, CANADA L4W 1B5.

Inventors : SEMOON OH.

Application for Patent No. 46/Del/85 filed on 23rd January, 1985.

Convention date 7th September, 1984/462710/(Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

10 Claims

A gas flow regulator for installation in a gas or air conduit comprising :

- a housing having a gas inlet, a gas outlet and a gas passageway extending between said inlet and said outlet, said passageway having a section that coverves radially inwardly in the direction of gas flow;
- a piston member arranged along the centre axis of said passageway and capable of axial movement along said passageway;
- cylinder means mounted on said piston member and capable of sliding axially relative to said piston member, said cylinder means being substantially closed;
- a plunger rigidly mounted on and surrounding said cylinder means, said plunger being arranged centrally in said passageway and in the region of said converging section and movable in the direction of gas flow in response to an increased rate of gas flow;
- spring means for biasing said plunger in an axial direction opposite, to the direction of gas flow;
- and motor means connected to said piston member and adapted to move said piston member, cylinder means, and attached plunger axially as required to increase or decrease the size of an annular opening between said plunger and the inside surface of said converging section and thereby regulate the rate of gas flow;
- wherein said piston member and cylinder means together act as damper means for movement of said plunger caused by changes in the rate of gas flow.

Compl. specn. 18 pages

Drg. 3 sheets

CLASS : 35 E

162534

Int. Cl : C04b 33/00 & 35/00.

A PROCESS FOR PRODUCING A CERAMIC MATERIAL CAPABLE OF DISINTEGRATING AT ABOUT 800°C.

Applicant & Inventors : DINESH CHANDRA AGRAWAL, PROCESSOR, MATERIALS SCIENCE PROGRAMME, I.I.T. KANPUR, PARVATI RAMASWAMY, MATERIALS SCIENCE PROGRAMME, I.I.T. KANPUR AND DIRECTOR LTD. KANPUR ALL INDIAN NATIONALS.

Application for Patent No. 66/Del/85 filed on 29th January, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

6 Claims

A process for preparing a ceramic material, which is dense and strong, resistant to acids and chemicals and which can withstand temperatures upto 1900°C and which can be used at all temperatures upto these temperatures in an oxygen deficient atmosphere and at temperatures between 1300 to 1900°C in even those atmospheres which contain oxygen but such material disintegrates at temperatures as low as 800°C in an atmosphere containing oxygen comprising the following steps : (a) mixing powders of zirconia with 4 to 15 mol% calcium carbonate. (b) precalcining the mixture obtained as a result of step (a) at 1000°C for 2 to 4 hours. (c) Subjecting the resultant mixture obtained from step (b) to a size reduction operation to obtain a powder having particle size in the range 2 to 10  $\mu\text{m}$  (d) shaping the resultant powder obtained from step (c) by any known process such as herein described and then (e) sintering the product obtained as a result of step (d) at a temperature in the range

of 1750°C to 1900°C in an atmosphere having very low (about 10-10 atmosphere) partial pressure of oxygen for a 4 hours to 1.5 hours

Compl. specn. 9 pages.

Drg. 1 sheet

CLASS : 107-H

162535

Int Cl : F02m 59/00.

WET MOTOR GEROTOR FUEL PUMP WITH FUEL FLOW THROUGH THE BEARING FOR COOLING THEREOF.

Applicant : FACET ENTERPRISES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE OF 7030 SOUTH YALE AVENUE, SUITE 800, TULSA, OKLAHOMA 74136, UNITED STATES OF AMERICA.

Inventor : WILLIAM ARTHUR CARLETON, JAMES ROBERT LOCKER, HARRY WINTHROP MOORE III & DAVID LEE WILLIAMS.

Application for Patent No. 85/Del/85 filed on 5th February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

8 Claims

A wet motor pump device having a rotating member with a shaft rotatable about a shaft axis, said shaft being supportable at one end portion of said shaft, said wet motor pump for pumping fluid through a wet motor chamber past said rotating member said device comprising :

outlet housing means comprising an end wall portion, said end wall portion defining an end wall passage;

bushing means extending along said shaft axis in a direction away from said end wall portion, said end portion of said shaft being mounted in said bushing means;

a pair of arcuate bore sections formed in said outlet housing means on opposite sides of said shaft axis, said pair of arcuate bore sections being spaced adjacent said bushing means and defining a recess;

at least one end chamber defined by said recess, said end wall portion of said outlet means, said bushing means and said end portion of said shaft mounted into said bushing means, said at least one end chamber further comprising:

an end chamber inlet passage means mounted adjacent said bushing means for providing inlet fluid flow along said bushing means into said end wall passage;

an end chamber outlet passage means mounted adjacent said bushing means a predetermined circumferential distance from said end chamber inlet passage means, said end chamber outlet passage means providing outlet fluid flow along said bushing means from said end wall passage away from said at least one end chamber, and

pressure differential means comprising a member fixed adjacent said end chamber inlet and outlet passage means for establishing a pressure differential between said end chamber inlet passage means and said end chamber outlet passage means;

whereby said pressure differential means causes a fluid flow into said end chamber inlet passage means, along said bushing means and said end wall passage and further along said end chamber outlet passage means to establish a cooling and lubricating system for said wet motor pump.

Compl. specn. 29 pages.

Drg. 6 sheets

CLASS : 107 H

162536

Int. Cl. : F02m 59/00.

## WET MOTOR GEROTOR FUEL PUMP.

Applicant : FACET ENTERPRISES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 7030 SOUTH YALE AVENUE SUITE 800, TULSA, OKLAHOMA 74136, UNITED STATES OF AMERICA.

Inventor : MICHAEL VINCENT WIERNICKI.

Application for Patent No. 86/Del/85 filed on 5th February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 8 Claims

A wet motor gerotor fuel pump<sup>10</sup> for pumping fuel from a fuel source to an internal combustion engine comprising :

a pump case<sup>12</sup> having one end, an opposite end and a flow axis therethrough, said pump case<sup>13</sup> further comprising an inlet end bore at said one end adapted to communicate with said fuel source;

an inlet chamber<sup>11</sup> adjacent said inlet end bore;

a motor chamber<sup>28</sup> located in said opposite end of said pump case;

a pump chamber<sup>31</sup> interposed said motor chamber and said inlet chamber;

first means for sealing said pump case<sup>14</sup>, said first means for sealing located at said opposite end of said pump case;

inlet housing<sup>11</sup> means mounted in said pump chamber<sup>14</sup>, said inlet housing means comprising an annular hub protruding into said inlet chamber<sup>18</sup>, said inlet housing means further comprising a gerotor cavity about a gerotor axis located parallel to and displaced a pre-determined distance in an eccentric radial direction from said flow axis;

outlet housing means having pump outlet means adapted to be communicated with said internal combustion engine and further comprising a second means for sealing coupled to said first means for sealing;

electric motor means comprising armature means comprising an armature shaft<sup>16</sup> with a first and a second end rotatably supported, respectively, at said inlet housing means and said outlet housing means, said armature means further comprising drive hub means having first tang means extending in a first radial direction relative to said armature shaft; and

gerotor pump<sup>10</sup> means located in said gerotor cavity said gerotor pump means comprising an inner pump<sup>12</sup> gear, an outer pump gear<sup>11</sup> and second tang means located on one of said inner and outer pump gears, said second tang means further extending in a second radial direction radially offset from said first radial direction and adapted to be drivingly coupled to said first tang means such that said fuel pump pumps fuel from said fuel source into said inlet chamber, through said gerotor means past said electric motor means into said outlet housing means substantially along said flow axis to said internal combustion engine.

Compl. specn. 29 pages.

Drg. 6 sheets

CLASS : 107H

162537

Int. Cl. : F02m 51/00.

## WET MOTOR FUEL PUMP.

Applicant : FACET ENTERPRISES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 7030 SOUTH YALE AVENUE, SUITE 800, TULSA, OKLAHOMA 74136, UNITED STATES OF AMERICA.

Inventor : HARRY WINTHROP MOORE III.

Application for Patent No. 87/Del/85 filed on 5th February, 1985

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 15 Claims

A wet motor fuel pump for pumping a liquid from a liquid source, said pump comprising :

a pump case having an inlet end, and outlet end, and a first, a second, and a third bore therebetween, said bores being coaxial with a flow axis therethrough and respectively defining a motor chamber, a pump chamber and an inlet chamber, and said inlet end adapted to be communicated with said liquid source;

inlet housing means received in said pump chamber, said inlet housing means comprising a pump cavity in said pump chamber and a hub protruding into said inlet chamber;

outlet housing means comprising outlet means, said outlet housing means further comprising vapor vent means;

pump means for pumping liquid from said inlet chamber under fluid pressure to said motor chamber; and

electric motor means comprising armature means having an armature shaft with a first and second end rotatably supported respectively at said inlet housing means and said housing means, said electric motor means further comprising;

first and second magnet means, each having an inner and an outer surface extending along said flow axis, a first and second side surface extending along said flow axis, and a first and a second end surface; and

means for separating said liquid from said armature means as said liquid flows from said pump cavity to said outlet housing means.

Compl. specn 32 pages.

Drg. 6 sheets

CLASS : 107 H

162538

Int Cl. : F02m 59/00.

## WET MOTOR GEROTOR FUEL PUMP

Applicant : FACET ENTERPRISES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 7030 SOUTH YALE AVENUE, SUITE 800, TULSA, OKLAHOMA 74136, UNITED STATES OF AMERICA.

Inventor : WILLIAM ARTHUR CARLETON.

Application for Patent No. 88/Del/85 filed on 5th February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

A wet motor gerotor fuel pump for pumping fuel from a fuel source to an internal combustion engine comprising :

pump case (12) having one end, an opposite end and a flow axis therethrough, said pump case further comprising an inlet bore (36) at said one end communicating with said fuel source;

an inlet chamber (38) adjacent inlet bore;

a motor chamber (28) in said opposite end of said pump case;

a pump chamber (34) interposed said motor chamber and said inlet chamber;

first sealing means for sealing said pump case, said first means for sealing located at said opposite end of said pump case;

inlet housing means (14) mounted in said pump chamber, said inlet housing means comprising annular

(42) hub protruding into said inlet chamber (38), said inlet housing means further comprising a gerotor cavity (118) about its axis located parallel to and displaced a predetermined distance in an eccentric radial direction from said flow axis (78);

outlet housing means (18) having pump outlet means 250 and 252) communicating with said internal combustion engine and further comprising a second sealing means connected to first sealing means;

electric motor means (20) comprising armature, said armature comprising an armature shaft (60) having a shaft axis and a armature shaft inlet end and armature shaft outlet end, each shaft end being supported, respectively, at said inlet housing means (14) and said outlet housing means (18), said armature further comprising drive hub means having first tang means (112, 114) extending in a first radial direction relative to said armature shaft; and

pump means located in said gerotor cavity (118), said pump means comprising an inner pump gear (142), an outer pump gear (144), and second tang means (172, 174) located on one of said inner and outer pump gears, said second tang means further extending in a second radial direction and forming a driving connection (177) with said first tang means (112/114) such that said gerotor fuel pump pumps fuel from said fuel source into said inlet chamber, through said pump means past said electric motor means into said outlet housing means substantially along said flow axis to said internal combustion engine, said driving connection between said second tang means and said first tang means allowing for end-for-end alignment between said armature shaft and said one of said inner gear and said outer pump gear characterised in that

said outlet housing means further comprising:

a cylindrical bore located in said outlet housing means, said cylindrical bore having a central axis;

a self-aligning bearing bushing mounted in said cylindrical bore for positioning said outlet end of said armature shaft relative to said central axis of said cylindrical bore, said self-aligning bearing bushing comprising an annular body having an axis and a crowned periphery portion with said crowned periphery portion extending radially away from said axis, said crowned periphery portion being in contact with said cylindrical bore, said annular body being generally circular in cross-section; and cylindrical bore axially aligned with axis of said annular body, said cylindrical bore adapted to receive said outlet end of said armature shaft; and

anti-rotation means coupling said self-aligning bearing bushing and said outlet housing means to prevent circumferential rotation of said self-aligning bearing bushing relative to said outlet housing means such that misalignment of said outlet end of said armature shaft relative to said central axis of said cylindrical bore in said outlet housing means is permitted by said crowned periphery portion of said self-aligning bearing bushing pivoting in said cylindrical bore of said outlet housing means in response to an axial alignment movement of said inlet end of said armature shaft at said inlet housing means while permitting said outlet end of said armature shaft to rotate within said cylindrical bore of said self-aligning bearing bushing.

Comp. specn. 31 pages.

Drg. 6 sheets

CLASS : 107 H & K

162539

Int. Cl. : F02m 59/00.

#### VENT RELIEF VALVE FOR A FUEL PUMP.

Applicant : FACET ENTERPRISES, INC, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 7030 SOUTH YALE AVENUE, SUITE 800, TULSA, OKLAHOMA 74136, UNITED STATES OF AMERICA.

Inventor : WILLIAM ARTHUR CARLETON.

Application for Patent No. 89/Del/85 filed on 5th February 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 9 Claims

A vent-relief valve for a fuel pump, said valve venting gases or vapor and also relieving fluid pressure greater than a predetermined fluid pressure of said pump said vent-relief valve comprising:

a ball valve;

a tubular valve having a vent passage therethrough adapted to be closed by said ball valve;

a body having an inlet passage, an outlet passage, and a valve bore therebetween, said valve bore containing said ball valve and said tubular valve, said tubular valve and said body cooperating to define a relief passage between said inlet passage and said outlet passage;

first biasing means between said ball valve and said tubular valve said first biasing means acting to bias said ball valve towards said inlet passage and said tubular valve towards said outlet passage, said ball valve cooperating with said inlet passage to establish a vapor bypass passage therebetween when said ball valve contacts said inlet passage, and said tubular valve having a vent passage therethrough adapted to be closed by said ball valve; and

second biasing means for biasing said tubular valve towards said inlet passage to close said relief passage between said inlet passage and said outlet passage, said second biasing means being between the tubular valve and said outlet passage;

said vapor pressure being vented through said vapor bypass passage and said vent passage of said tubular valve until said fuel pump develops said fluid pressure greater than said predetermined fluid pressure thereby overcoming said first biasing means to cause said ball valve to close said vent passage and cause said tubular valve to be urged towards said outlet passage and open said relief passage against the force of said second biasing means whereby the excess fluid pressure is relieved through said relief passage.

Compl. specn. 26 pages.

Drg. 6 sheets

CLASS : 5 D&E

162540

Int. Cl. : A01g 9/00.

#### AN IMPROVED FODDER PRODUCTION UNIT.

Applicant : JOHN RICHARD BRADY, RESIDING AT CASTELLANA-SUITE 112, PASEO DE LA CASTELLANA, 49, MADRID-28046, SPAIN, A NATIONAL OF U. S. A.

Inventor : JOHN RICHARD BRADY.

Application for Patent No. 144/Del/85 filed on 20th February, 1985.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 6 Claims

An improved fodder production unit for growing hydroponic grass from cereal grain seeds comprising:

one floor, one ceiling and lateral walls to define an environmentally controlled chamber, means in said chamber to support a number of horizontal seed beds in side to side position, said means extending inwards from the lateral walls to form elongated rows vertically spaced from each other, from the floor to the ceiling of the chamber, one sump in the floor to contain a hydroponic nutrient solution, means to periodically draw a certain amount of the solution in excess of the trays and the grass plants that grow from them, and to apply said excess to said plants;

means to supply light to said plants in growth; means to supply light to said plants in growth;

the said chamber resting on a supporting skid and being built of sandwich type stand up panels, including in the chamber a front panel that has in the upper part an air conditioning unit and in the lower part an entrance door which has air-tight locking rubber of special design, hinges and treated locking, as well as a lock and a handle, being situated in the inner side of the door are leakproof lights, and on the left side of the front panel there is an electric panel box having the various elements necessary for the correct electrical operation of the growing unit;

the rear panel is equipped with an airconditioning unit in the upper part, and in the bottom part a trap door with its corresponding hinges, air-tight locking rubber of special design and treated lockings, as well as an corresponding handle, and also located in the inner side of this rear panel, and at either side of the airconditioning unit, are the leakproof lights, the lateral panels on the inner side have the lights, the lateral panels on the inner side have the channels to collect and pipe off the nutrient solution, each of them fastened to the lateral panel as well as the irrigation lines also being fastened to the lateral walls, being planned from this a multiple manifold distribution of the nutrient solution through the lateral lines, and also the placed lights; and

a floor panel is provided with a sump tank or water deposit to hold the nutrient solution, and that has some columns which serve as support for a tubular structure formed by pipes running parallel to the floor and used to support the grass growing trays, doing the suction of nutrient solution from the sump tank by means of the pump units that pipe out the solution to each of the multiple manifolds;

the means for withdrawing the solution and applying it to the seed and grass plants include a plurality of nozzles provided in the chamber for projecting a substantially flat diverging spray pattern in a plane substantially parallel to the trays, the spray pattern for each one of the rows of trays, the spray pattern for each one of the rows of trays being provided by a series of nozzles spaced above the row and just below the row stacked thereabove, the nozzles for each row are spaced horizontally along an edge of the row to project the solution toward the other edge thereof;

the horizontally spaced nozzles for each row are angularly directed towards a next adjacent nozzle, so that the spray pattern from pairs of adjacent nozzles converge above the row forming an interference pattern, causing the nutrient solution to form a fine mist which settles uniformly upon the seeds and the plants in the row therebelow.

## OPPOSITION PROCEEDINGS

An opposition has been entered by Excella Tiles to the grant of a Patent application No. 161309 made by Suresh Chandra Suri.

## OPPOSITION PROCEEDINGS

An opposition has been entered by Excella Tiles to the grant of a Patent application No. 161310 made by Suresh Chandra Suri.

## PATENTS SEALED

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## REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 159241. Hawkins Cookers Ltd., F-101, maker Towers, 10th flrs., Cuffe Parade, Bombay-400 005, Maharashtra, India. "Utensil". January 6, 1988.

Class 1. Nos. 159242 to 159245. Teknic Controls, 116, Hammersmith Industrial Estate, Mahim, Bombay-400 016, Maharashtra, India, Indian Company (Partnership). "Switch Control Device". January 6, 1988.

Class 1. Nos. 159432 & 159433. Dilip Jagmohandas Daphary, an Indian National, 36-37 Jolly Maker Chambers II, Nariman Point, Bombay-400 021, Maharashtra, India. "Spherical Cylinder". February 25, 1988.

Class 3. No. 158666. Wimco Pen Company, 11, Mehta Industrial Estate, 1st floor, I. B. Patel Road, Goregaon (East), Bombay-400 063, Maharashtra, India, Indian Partnership Firm. "Lunch Pack". August 7, 1987.

Class 3. No. 158861. Caroma Industries Ltd. of 31, Market Street, Brisbane, Queensland 4000, Australia, Australian Company. "A cistern". Priority date April 10, 1987 (Australia).

Class 3. No. 158982. H. A. G. Soap & Chemical Works (P) Ltd., 145, Keshav Chandra Sen Street, Calcutta-700 016, W. B., India, an Indian Company. "Container". October 30, 1987.

Class 3. No. 158898. Kores (India) Ltd., Plot No. 10, Off. Dr. E. Moses Road, Worli, Bombay-400 018, Maharashtra, India. "Clips". October 7, 1987.

Class 3. Nos. 158946 to 158948. MRF Ltd. of Tarapore Towers, 826, Anna Salai, Madras-600 002, India, Indian Company. "Tyre". October 20, 1987.

Class 3. No. 158953. Shree Krishna Keshav Laboratories Ltd., Amraiwadi Road, Ahmedabad-380 008, Gujarat, India, an Indian Company. "Knife". October 20, 1987.

Class 3. No. 158980. Advert Pen (Mfg) Company of 103, Bussa Heavy Industrial Estate, Hanuman Lane, Lower Parel, Bombay-400 013, Maharashtra, India, Indian proprietary firm. "Pen". October, 29, 1987.

Class 3. No. 159071. Sp Tyres UK Limited, a British Company, of Fort, Dunlop, Birmingham B24 9QT, England. "Tyre Tread". Priority date June 11, 1987 (UK).

Class 3. No. 159068. Magnat Ram trading as Footwear Enterprises, Indian Co., of C/o. Khurana Publicity, 6, The Mall, Agra-232 001 (UP), India. "Footwear Sole". November 26, 1987.

Class 3. No. 159075. Shako Plastic, Gujarat Industrial Compound, Tilak Nagar, Off Aarey Road, Goregaon (East), Bombay-400 063, Maharashtra, India, Indian Proprietary Firm. "Cap of Bottle". November 30, 1987.

Class 3. No. 159143. B. P. Indian Agencies Joint Enterprise Ltd., Indian Company of Hamilton House, J. N. Heredia Marg, Ballard Estate, P. O. Box No. 919, Bombay-400 038, Maharashtra, India. "Ant Bait". December 8, 1987.

Class 3. 159145. B. P. Indian Agencies Joint Enterprise Ltd., Indian Company of Hamilton House, J. N. Heredia Marg, Ballard Estate, P. O. Box No. 919, Bombay-400 038, Maharashtra, India. "Cockroach Bait". December 8, 1987.

Class 3. No. 159172. N. V. Philips' Gloeilampenfabrieken, a Limited Liability Co., of Groenewoudseweg 1, Eindhoven, the Netherlands. "Electric Iron". Priority date July 15, 1987 (UK).

Class 3. Nos. 159246 to 159249. Teknic Controls of 116, Hammersmith Industrial Estate, Mahim, Bombay-400 016, Maharashtra, India, an Indian Company. "Switch Control Device". January 6, 1988.

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